



THE EEADER IN ENVIRONMENTAL TEOTING

LABORATORY REPORT

Prepared For: Burns & McDonnell Project: 62589

9400 Ward Parkway Kansas City, MO 64114

Attention: Diana Marquez Sampled: 11/27/12-11/28/12

Received: 11/29/12

Issued: 12/11/12 13:05

NELAP #01109CA / AZ100001 California ELAP#2446 Arizona DHS#AZ0728 Nevada #AZ01030 ORELAP #AZ100001

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PVK1798-01	DP129W03A/48-52	Water
PVK1798-02	DP129W04/54-58	Water
PVK1798-03	DP129W02/41-46	Water
PVK1798-04	DP129W05/59-64	Water

SAMPLE RECEIPT: Samples were received intact, at 2°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica

Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: Results that fall between the MDL and RL are 'J' flagged.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:

TestAmerica Phoenix

Linda Eshelman Project Manager



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4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602)

Burns & McDonnell Project ID: 62589

9400 Ward Parkway Sampled: 11/27/12-11/28/12

Kansas City, MO 64114 Report Number: PVK1798 Received: 11/29/12

Attention: Diana Marquez

1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Data Qualifiers				
Sample ID: PVK1798-01 (DP129W03A/48-52 - Water) Reporting Units: ug/l													
1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	EPA 8270C	12K1137	0.57	1.1	ND 37 % 84 %	1.12	11/30/12	12/05/12	E8				
Sample ID: PVK1798-02 (DP129W04/54- Reporting Units: ug/l	58 - Water)				Sampled: 11/27/12								
1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	EPA 8270C	12K1137	0.51	1.0	ND 37 % 85 %	1.1	11/30/12	12/05/12	E8				
Sample ID: PVK1798-03 (DP129W02/41- Reporting Units: ug/l				Sample	ed: 11/28/1	12							
1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	EPA 8270C	12K1137	0.51	1.0	ND 42 % 88 %	1.1	11/30/12	12/05/12	E8				
Sample ID: PVK1798-04 (DP129W05/59- Reporting Units: ug/l			Sample	ed: 11/28/1									
1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	EPA 8270C	12K1137	0.51	1.0	ND 35 % 75 %	1.08	11/30/12	12/05/12	E8				



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Burns & McDonnell 9400 Ward Parkway

METHOD BLANK/QC DATA

1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 12K1137 Extracted: 11/30/12											
Blank Analyzed: 12/04/2012 (12K1137-BL	K1)										
1,4-Dioxane	ND	1.0	0.51	ug/l							
Surrogate: 1,4-Dioxane-d8	7.67			ug/l	20.0		38	14-125			
Surrogate: Nitrobenzene-d5	18.0			ug/l	20.0		90	27-143			
LCS Analyzed: 12/04/2012 (12K1137-BS1)										
1,4-Dioxane	20.4	1.0	0.51	ug/l	20.0		102	85-116			
Surrogate: 1,4-Dioxane-d8	7.37			ug/l	20.0		37	23-132			
Surrogate: Nitrobenzene-d5	17.1			ug/l	20.0		86	28-150			
LCS Dup Analyzed: 12/04/2012 (12K1137	-BSD1)										
1,4-Dioxane	20.9	1.0	0.51	ug/l	20.0		104	85-116	3	20	
Surrogate: 1,4-Dioxane-d8	7.11			ug/l	20.0		36	23-132			
Surrogate: Nitrobenzene-d5	17.7			ug/l	20.0		88	28-150			
Matrix Spike Analyzed: 12/04/2012 (12K1	137-MS1)				Sour	ce: PVK	1683-01				
1,4-Dioxane	23.3	1.1	0.56	ug/l	22.2	ND	105	65-138			
Surrogate: 1,4-Dioxane-d8	9.01			ug/l	22.2		41	14-125			
Surrogate: Nitrobenzene-d5	20.9			ug/l	22.2		94	27-143			
Matrix Spike Dup Analyzed: 12/04/2012 (D1)			Sour	ce: PVK	1683-01					
1,4-Dioxane	24.7	1.1	0.57	ug/l	22.5	ND	110	65-138	6	20	
Surrogate: 1,4-Dioxane-d8	7.57			ug/l	22.5		34	14-125			
Surrogate: Nitrobenzene-d5	18.0			ug/l	22.5		80	27-143			

TestAmerica Phoenix

Linda Eshelman Project Manager



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DATA QUALIFIERS AND DEFINITIONS

E8 Analyte reported to the MDL per project specification. Target analyte was not detected in the sample.

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference

<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (10/10)

CHAIN OF CUSTODY FORM

[※Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303 [] Tucson - 1870 W. Prince Road, Suite 59, Tucson, AZ 85705 (520) 807-3801 FAX (520) 807-3803 [] Las Vegas - 6000 S Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264						
	Project/PO Number:	ed				
	and the second section is	1 1				

Client Name / Address: Burns & No Occimul/				Project/PO Number:				Analysis Required									
9400 Word Parkway Kansas Cty MO CYHY Project Manager: Diana Marquez Sampler: Kevin Bolling			6,9589					0									
							4 Broxane										
			Phone Number: \$16 333 9400					-							1		
			Fax Number:														
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives										Special Instruction	s
DP129W03A/48-52	W	in Amber	2	11-27-12	1300	<u>tuin</u>	X						P	VKI	79	8-01	
DP 129W04/54-58	W	Amtes	2	11-22-12	1335		乂									- 02	
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Relinquished By: Date/Time:				Received By:			Date/Time:					24 hours			5 days normal		
Relinquished By: Date / Time:				Received in Lab By:				Bhr 09:40 11/35/12					Sample Integrity: (Check)				
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Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project.

Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.